MAYO FULLY COVERED VERSUS UNCOVERED SELF-EXPANDING METAL STENTS FOR THE TREATMENT OF DISTAL CLINIC MALIGNANT BILIARY OBSTRUCTION IN THE SETTING OF LOCALLY ADVANCED PANCREATIC CANCER JTT'

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INTRODUCTION

- Self-expanding metal stents (SEMS) are preferred for the treatment of distal biliary obstruction (dMBO) caused by pancreatic cancer [1]
- Optimizing biliary drainage in the neoadjuvant period while patients await definitive surgical treatment is essential

AIMS

Compare clinical outcomes of patients who underwent fully covered (FCSEMS) versus uncovered (UCSEMS) placement for the treatment of dMBO due to locally advanced pancreatic cancer (LAPC)

METHODS

- Retrospective, cohort study, single tertiary care center
- Consecutive patients who underwent biliary SEMS placement for treatment of dMBO in the setting of LAPC between May 2017 and May 2021
- Categorized into FCSEMS or UCSEMS cohorts based on the type of stent placed during index ERCP
- Primary outcomes: clinical success, overall incidence of adverse events (AEs) and need for unplanned endoscopic reintervention
- Secondary outcomes: stent patency, type of AEs, and overall survival

KEY DEFINITIONS			
Clinical success	reduction in serum bilirubin by either 33% within a week or 50% within 2 weeks of stent insertion, OR resolution of symptoms in patients with normal baseline bilirubin		
Adverse events	stent-related events (migration, occlusion, maldeployment), bleeding, perforation, infection (cholecystitis, intra-abdominal infection, sepsis), and post-ERCP pancreatitis (PEP).		
Unplanned reintervention	endoscopic procedure to manage stent-related AEs, including stent obstruction, stent migration, bleeding, and ulceration		
Post-ERCP pancreatitis	abdominal pain typical of acute pancreatitis, serum lipase >3 times upper normal value, characteristic findings of acute pancreatitis on imaging		

Figure 1. Primary outcomes





Figure 2 (A) Cumulative patency time. Patients without stent obstruction were censored at the time of surgery, last follow-up or death. (B) Overall survival

	UCSEMS n=152	FCSEMS n=35	P Value
Adverse Events	50 (32.9)	5 (14.3)	0.030
Stent Occlusion	44 (28.9)	1 (2.9)	0.001
PEP	8 (5.3)	2 (5.7)	1.00
Stent Migration	3 (2.0)	2 (5.7)	0.24
Cholecystitis	1 (0.7)	0	1.00
Time to unplanned reintervention (months)	4.4 (3.0- 5.6)	4.3 (3.6- 5.1)	0.81
Time to stent occlusion (months)	4.4 (3.0- 5.6)	5.9 (5.9- 5.9)	0.73
Follow up time (months)	15.6 (8.8- 24.6)	22.4 (8.3- 27.9)	0.225
Death	84 (55.3)	22 (62.9)	0.41

UCSEMS uncovered self-expandable metal stent, FCSEMS fully covered self-expandable metal stent PEP post-ERCP pancreatitis. Values are presented as median (IQR) or n (%), Fisher exact performed if for any event number < 5



DISCUSSION

- between both cohorts

- potential cost implications

CONCLUSION

- studies to evaluate cost implications

REFERENCES

- 2. Isayama H, Komatsu Y, Tsujino T, et al. A prospective Gut 2004;53:729-734.

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• Similar follow up time, time to surgery, and survival

• FCSEMS were associated with longer patency times

• Improved patency driven by lower rates of stent occlusion

• FCSEMS required fewer unplanned intervention

• While index stent cost of an FCSEMS may be higher [2], reduced number of unplanned interventions may have

 FCSEMS may be preferred to UCSEMS in the palliation of dMBO in anatomically amenable patients with LAPC

Additional randomized studies are needed, as well as

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randomised study of "covered" versus "uncovered" diamond stents for the management of distal malignant biliary obstruction.

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